

Planning Tool for Beef Feeding Sites

Ver. 2, Oct 2007

(Your Goal is to Score Low)

Low Risk (<80)

Medium Risk (80-115)

High Risk (>115)

Required Site Characteristics					
Flooding Potential	No Flooding on feeding area from 25 year storm				
Surface Water Runoff Entering Feeding Areas	No runoff water passes through feeding area as sheet or concentrated flow				
Feed Area Setback	> 300 feet setback required from feed area to residence other than owner or public use				
Vegetated Buffer Zone around Livestock Access Area with less than 60% cover	Exclusion vegetative buffer around downslope perimeter of livestock access area equals 60 feet for < 100 head + 30 feet for additional 100 head + 10 feet for each 5% increase in slope (i.e., 200 head on 10% slope = 110' buffer width).				
Optional Site Characteristics	4-Best	12	20-Worst	Before Points	After Points
Typical Slope of Area below Feeding Area	< 2%	2% - 12%	> 12%		
No. of Animals using the feed area	1 point per 5 cows, heifers, or steers (e.g. 25 cows = 5 pts)				
No. of PADDOCKS with > 60% vegetation and controlled access to feed site (no more than 30 head per acre per paddock)	4 or more	2 or 3	1 or none		
Predominant Hydrologic Soil Group in location of feed area	B	C	A or D		
SubTotal					
Optional Site Characteristics	3-Best	9	15-Worst	Before Points	After Points
Livestock Exclusion vegetative buffer below Feed Area	35' wide or greater exclusion veg buffer w/ access mounds to paddocks or field; or feed area roofed	10' to 35' wide exclusion veg buf w/ access mounds to paddocks or field	No exclusion veg buffer below feed area		
Vegetative Buffer distance to sensitive areas from all areas w/ less than 75% vegetative cover	> 300 feet of vegetative buffer	100 to 300 feet of vegetative buffer	< 100 feet vegetative buffer		
Size of feed area void of vegetation during winter months	< 0.25 acre	0.25 -1.0 acre	> 1.0 acre		
Months livestock feed in Feed Area per year	< 3 months or feed area is roofed	3 - 6 months	> 6 months		
Manure Storage	Manure storage period of > 60 days under roofed or covered facility	Manure storage period of 15 to 60 days under roof or else properly covered	< 15 days in covered manure storage or stored in piles exposed to weather		
Feed Area Management	Feed Area is protected from weather with cover through the winter or is frequently rotated (at least weekly) by relocating rings or unrolling hay	Feed Area is exposed to weather	Feed Area is typically in same spot all winter and exposed to weather		
SubTotal					
Other Site Characteristics	2-Best	6	10-Worst	Before Points	After Points
Watering Source	Off-site waterers - no access to waterbody	controlled access to waterbody	uncontrolled access to waterbody		
Nutrient Management	Manure spread according to Nutrient Management Plan*	Manure spread throughout winter without Nutrient Management Plan	Manure accumulates in same spot. Little or no manure		
SubTotal					
Grand Total					
Risk Rating =					

* CNMP should be implemented on sites where Nutrient Management Plan is developed and site is evaluated at MEDIUM or LOW Risk. A CNMP or equivalent must be developed on all HIGH Risk sites or where 300 or more animals feed as a group on one feed area. Individual feeding areas must have a minimum separation distance of 300 feet from each other. A CNMP is encouraged on sites where a Nutrient Management Plan is developed and site is evaluated at MEDIUM or LOW Risk.

PURPOSE OF THIS TOOL

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The primary emphasis of this planning tool is to evaluate existing and/or new beef feeding sites and to relocate those sites if necessary to more environmentally friendly locations. It carries the user/planner through a process of evaluating the feeding site's before/after conditions and involves the consideration of several Best Management Practices alternatives by the landuser. There are 3 ratings for sites. Sites can be rated, **High**, **Medium**, or **Low** risk for potential off-site contamination of surface water from feeding sites. Sites that are rated **HIGH** would generally have a high potential for off-site contamination of surface water whereas sites rated as **LOW** would generally have a low potential for off-site contamination of surface water.

Sites with greater than 115 points are considered **HIGH** risk for off-site movement of nutrients and pathogens. A CNMP or equivalent must be developed on all **HIGH** Risk sites or where 300 or more animals feed as a group on one feed area. Individual feeding areas must have a minimum separation distance of 300 feet from each other. A CNMP is encouraged on sites where a Nutrient Management Plan is developed and site is evaluated at **MEDIUM** or **LOW** Risk.

DEFINITIONS

Amount of Ground Cover around Feeding Area - Regardless of height, cover as vegetation or residue is present at listed percentages.

Area void of vegetation greater than 6 months of year - This includes all areas void of vegetation: field or paddock areas. Ideally this area will be no larger than 0.5 to 1 acre per 70 head. Locate area away from sensitive areas such as concentrated flow, streams, ponds, lakes, wells, sinkholes, karst topography, wetlands or other environmentally sensitive areas.

Feed Area - Area where livestock are fed and vegetation is non-existent.

Feeding Area Vegetative Buffer - A exclusion area well vegetated which filters runoff water immediately below feed area. Access to paddock(s) will be through access lanes consisting of mounds of rock or lime (HUA type construction). Access lanes will be no wider than 24' and extend the width of the vegetative buffer. Two (2) or more paddocks should have access to lane in multiple paddock systems. The feeding area exclusion vegetative buffer, when required, is in addition to any sensitive area buffer requirements.

Flooding Potential - Any area that has the potential to flood.

Livestock Access Area - Livestock management area or area where livestock spend time loafing. Can be feed area.

Manure Storage - Storing manure in facility until suitable application period.

Mounds - for access to and from feeding to loafing paddocks. Access mounds will be no wider than 24' and extend the width of the vegetative buffer. Access land mounds will be maintained a minimum of 0.75' high.

Paddocks - Vegetated areas that are used as exercise lots with some grazing but grazing is not the intent of small paddocks. Ideal vegetation on these areas is bermudagrass and or tall fescue. Vegetation should not be grazed lower than 3" however due to spot grazing and the need for additional special use area "sacrifice area" up to 20% of the paddock area can be grazed lower at any one time. To protect vegetation on 80% or more of the paddocks livestock should be held on heavy use area or a designated portion of the paddock that has the least environmental impact.

Sensitive Area - A water conveyance, well, stream, pond, lake, wetland, sinkhole, or karst, etc.

Controlled Access to Water - Implement livestock exclusion from waterbody and construct controlled HUA access points to water or provide water via pipeline and fabricated water facility.

REFERENCES

Swisher, Jerry, Virginia Tech., Nutrient Management Using Intensively Managed Loafing Lots on Dairies, "Dairy Loafing Lot Rotational Management System"

West, Brian, Alberta Agriculture, Food and Rural Development, Alberta Cattle Commission, "Cattle Wintering Sites", Managing for Good Stewardship

USDA, NRCS, EFOTG, Section IV, Standards: Animal Trails and Walkways, Fencing, Filter Strip, Heavy Use Area, Nutrient Management, Pasture and Hay Planting, Prescribed Grazing.

The University of Tennessee Agricultural Extension Service, "Tennessee Master Beef Producer Manual", PB1722

